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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,533	04/16/2004	Timothy D. Twerdahl	PA2254US	2160

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EXAMINER
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PITARO, RYAN F

ART UNIT	PAPER NUMBER
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2174

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/826,533

Applicant(s)

TWERDAHL ET AL.

Examiner

Ryan F. Pitaro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-23 have been examined.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1,2,3,5,6,10,11, and 12 are rejected under 35 U.S.C. 102(a) as being anticipated by Orbanes et al ("Orbanes", US 2002/0089541).

As per independent claim 1, Orbanes teaches a graphical user interface for a computing device comprising: a radial menu including a plurality of first level menu items in a circumferential arrangement (Figure 6a, [101] lines 1-9); the graphical user interface being configured such that a selection of one of the plurality of first level menu items causes a plurality of second level menu items associated with the one first level menu item to replace the first level menu items in the circumferential arrangement (Figure 6b, [101] lines 9-17).

As per claim 2, which is dependent on claim 1, Orbanes teaches the graphical user interface wherein the radial menu further includes a central object disposed within the circumferential arrangement (Figure 6a, [101] lines 1-2).

As per claim 3, which is dependent on claim 2, Orbanes teaches the graphical user interface wherein the central object includes text or an icon to represent a user operation (Figure 6a, [101] lines 1-2).

As per claim 5, which is dependent on claim 3, Orbanes teaches the graphical user interface wherein the user operation includes displaying the first level menu items ([101] lines 9-17, [102] lines 1-6).

As per claim 6, which is dependent on claim 1, Orbanes teaches the graphical user interface wherein the plurality of first level menu items are populated according to a default configuration ([104] lines 1-23, wherein the first level is default).

As per claim 10, which is dependent on claim 1, Orbanes teaches the graphical user interface wherein at least one of the plurality of first level menu items includes text or an icon to represent a link to another menu level ([101] lines 9-17).

As per claim 11, which is dependent on claim 1, Orbanes teaches the graphical user interface wherein at least one of the plurality of second level menu items includes text or an icon to represent a link to an application ([107] lines 1-17).

As per independent claim 12, Orbanes teaches computing device comprising: a display screen; a processor configured to present a graphical user interface on the display screen, the graphical user interface ([100] lines 1-8) comprising a radial menu including a plurality of first level menu items in a circumferential arrangement (Figure 6A [101] lines 1-9); the graphical user interface being configured such that a selection of one of the plurality of first level menu items causes a plurality of second level menu items associated with the one first level menu item to replace the first level menu items

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in the circumferential arrangement (Figure 6b, [101] lines 9-17); and an input device configured to send a user input to the processor for navigating the radial menu ([101] lines 9-17).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Orbanes et al ("Orbanes", US 2002/0089541).

As per claim 4, which is dependent on claim 3, Orbanes fails to teach switching between list and radial menu. However, OFFICIAL NOTICE is taken that adaptation of menus is well known in the art. Therefore it would have been obvious to combine replacing a radial menu with a list menu with the teaching of Orbanes. Motivation to do so would have been to provide a user with the option to use a more conventional and recognizable menu format.

Claims 7-9 rejected under 35 U.S.C. 103(a) as being unpatentable over Orbanes et al ("Orbanes", US 2002/0089541) in view of Atkinson ("Atkinson", US 5,701,424).

As per claim 7, which is dependent on claim 1, Orbanes fails to teach menu items populated by user preference. However, Atkinson teaches a graphical user

interface wherein the plurality of first level menu items can be populated according to a user preference (Column 2 lines 66-67, Column 3 lines 1-14). Therefore it would have been obvious to an artisan at the time of the invention to combine the user preference teaching of Atkinson with the graphical user interface of Orbanes. Motivation to do so would have been to provide the highest frequency commands at the easiest selectable positions.

As per claim 8, which is dependent on claim 1, Orbanes-Atkinson teaches a graphical user interface further comprising a list format of menu items adjacent to the radial menu (Atkinson, Figure 4).

As per claim 9, which is dependent on claim 7, Orbanes-Atkinson teaches a graphical user interface further configured to allow menu items to be exchanged between the list format and the radial menu (Atkinson, Column 2 lines 66-67, Column 3 lines 1-14).

Claims 13,15,16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Orbanes et al ("Orbanes", US 2002/0089541) in view of Miller-Smith ("Miller-Smith", US 2003/0164818).

As per claim 13, which is dependent on claim 12, Orbanes fails to specifically point out a handheld device. However, Miller-Smith teaches a computing device wherein the computing device is a handheld device (Figure 2), Therefore it would have

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been obvious to an artisan at the time of the invention to combine the handheld teaching of Miller-Smith with the teaching of Orbanes. Motivation to do so would have been to make the computing device portable.

As per claim 15, which is dependent on claim 12, Orbanes-Miller-Smith teaches the computing device wherein the input device is an analog input device comprising a two-axis joystick mechanically biased to a center position (Claim 7 lines 1-2).

As per claim 16, which is dependent on claim 15, Orbanes-Miller-Smith teaches the computing device wherein selection of a first or second menu item is affected by returning the joystick to the center position (Miller-Smith, [0014] lines 1-7).

Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Orbanes et al ("Orbanes", US 2002/0089541) in view of Rosenberg et al ("Rosenberg", US 2001/0010513).

As per claim 14, which is dependent on claim 12, Orbanes fails to teach an actuator for producing tactile feedback. However, Rosenberg teaches a computing device of further comprising an actuator for producing a tactile feedback, the processor being further configured to signal the actuator to produce the tactile feedback as the radial menu is navigated ([0068] lines 1-17). Therefore it would have been obvious to an artisan at the time of the invention to combine the tactile feedback teaching of Rosenberg with the teaching of Orbanes. Motivation to do so would have been for

enhancing interactions and manipulations in a graphical environment provided by a computer.

Claims 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller-Smith ("Miller-Smith", US 2003/0164818) in view of Rosenberg et al ("Rosenberg", US 2001/0010513).

As per independent claim 17, Miller-Smith teaches a computing device comprising: a display screen (Figure 2, item 17); a processor configured to present a graphical user interface on the display screen, the graphical user interface comprising a menu (Figure 2); and a handheld device including an input device configured to send a user input to the processor for navigating the menu (Figure 2 item 16). Miller-Smith fails to teach tactile feedback. However, Rosenberg teaches an actuator for producing a tactile feedback, the processor being further configured to signal the actuator to produce the tactile feedback as the menu is navigated ([0068] lines 1-17). Therefore it would have been obvious to an artisan at the time of the invention to combine the tactile feedback teaching of Rosenberg with the teaching of Miller-Smith. Motivation to do so would have been for enhancing interactions and manipulations in a graphical environment provided by a computer.

As per claim 18, which is dependent on claim 17, Miller-Smith-Rosenberg teaches a computing device, wherein the handheld device further includes the display



screen and the processor (Miller-Smith, Figure 2 item 17).

As per claim 19, which is dependent on claim 17, Miller-Smith-Rosenberg teaches a computing device wherein the menu is a radial menu (Miller-Smith, Figure 1).

As per claim 20, which is dependent on claim 17, Miller-Smith-Rosenberg teaches a computing device wherein the tactile feedback is a vibration (Rosenberg, [0068] lines 1-17).

As per claim 21, which is dependent on claim 17, Miller-Smith-Rosenberg fails to teach an analog input device. However, OFFICIAL NOTICE is taken that analog input devices are well known in the art. Therefore it would have been obvious to an artisan to combine the teaching of an analog joystick with the device of Miller-Smith-Rosenberg. Motivation to do so would have been to allow for full control and flexible positioning within the user interface.

As per claim 22, which is dependent on claim 17, Miller-Smith-Rosenberg teaches a computing device wherein the processor is further configured to signal the actuator to produce the tactile feedback when a menu item is selected (Rosenberg, [0068] lines 1-17).

As per claim 23, which is dependent on claim 17, Miller-Smith-Rosenberg teaches a computing device further configured to produce a sound when the actuator is signaled to produce the tactile feedback (Rosenberg, [0050] lines 1-16).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan F. Pitaro whose telephone number is 571-272-4071. The examiner can normally be reached on 7:00am - 4:30pm M-Th, and alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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